A vegetable breeding consortium is your research partner for improved sales, profits and impact

APSA members with interest in plant breeding for the development of improved vegetable varieties can tap into the knowledge and expertise of the internationally renowned leader in crop research, by joining the APSA-WorldVeg vegetable breeding consortium.

Join the APSA-WorldVeg vegetable breeding consortium!

Ready to take your company to the next level? Join the APSA-WorldVeg vegetable breeding consortium and discover how exposure to the latest research and closer contact with international world-leading vegetable breeders and scientists will change the way you do your breeding, and improve your business. You also receive 15 exclusive breeding lines, free of charge, free participation at the annual workshop, access to world-leading vegetable breeding, 20% discount on training courses, and many other benefits!

The World Vegetable Center (WorldVeg) is a non-profit agricultural research and development institute, and the only one in the world with an exclusive mandate on vegetables. Its mission is to conduct research and development to realize the potential of vegetables for healthier lives and more resilient livelihoods. WorldVeg research provides small-scale farmers with knowledge, skills, technologies and opportunities to boost their yields and increase their incomes. Our activities strengthen the entire vegetable value chain, to unleash the economic, nutritional and resilience power of vegetables, from breeding and vegetable seed systems to market access and awareness of the need for a healthy diet. WorldVeg carries out its mission by forming research partnerships with government, non-governmental and private sector organizations in developing and developed countries to conserve and utilize vegetable biodiversity, improve vegetable varieties, and increase vegetable production, marketing, and consumption.
WHY have a consortium?

Coping with emerging pests and diseases, and increasing heat and drought stresses, requires developing successful varieties by using genetic resources with abiotic and biotic stress tolerance for. We are sourcing these traits from the germplasm of the WorldVeg genebank – the largest collection in the world – and introducing them into breeding lines for private sector partners to use in their breeding programs.

Since the start of the consortium in 2017, WorldVeg has sent 10,456 seed samples to seed companies. In 2022, consortium members reported 158 varieties on the market wholly or partially based on WorldVeg breeding lines and over 50 tons of seed sales.

As advances in biotechnology and genomics accelerate the pace of vegetable cultivar development, to stay competitive, seed companies of all sizes must have a robust understanding of the latest vegetable breeding research, the practical skills to apply new breeding methods, and access to a diverse collection of vegetable germplasm to remain ahead of the pack in turbulent markets and climates.

Through the APSA-WorldVeg vegetable breeding consortium, participating companies and WorldVeg researchers have multiple opportunities to discuss and evaluate breeding approaches, and to discover together new avenues to share data and progress, creating a win-win situation. The consortium focuses on tomato, pepper (chili and sweet), cucurbits (bitter gourd, pumpkin/winter squash), and explores other vegetables as determined by consortium companies' interests.
BENEFITS for consortium companies

Professional interaction at annual workshops
Come to the source! At the Annual APSA-WorldVeg vegetable breeding consortium workshop - an event held exclusively for consortium companies, WorldVeg researchers demonstrate new lines from the Center’s vegetable improvement program, and compares results from consortium companies who have been implementing field trials of WorldVeg lines.

During the workshop, consortium companies listen to scientific presentations about ongoing WorldVeg breeding research, and ask questions. But importantly, they view first hand demonstration trials of consortium exclusive lines and hybrids, preliminary yield trials, and advanced testing stages of selected elite breeding lines.

Each workshop last two days, held at WorldVeg headquarters, Shanhua, Taiwan. WorldVeg offers free workshop participation to one employee from each consortium company, when participants have the opportunity to hold discussions with WorldVeg scientists, and can have further meetings by appointment. All workshop participants must however cover their transportation costs, and prior registration is required.

Early access to improved lines and information
Consortium companies is granted for a 24-month exclusivity from 1 July each year (‘lead access period’) for accessing the annually selected exclusive breeding lines and hybrids. These are then made available for request after completing all seed export quarantine procedures. Consortium companies who request consortium exclusive lines or hybrids at later dates will not be able to extend the lead access period.

WorldVeg cannot guarantee the receipt of seeds by consortium companies within a specific timeframe after dispatch, or at all due to import laws and requirements which WorldVeg has no control over. Consortium companies shall advise WorldVeg in advance regarding specific requirements for seed importation. For example, both DSIR (Department of Scientific Industrial Research) and Non-DSIR accredited companies in India are responsible for all seed importation requirements, and as such, WorldVeg does not provide services related to seed importation into India.

Consortium companies have early access to screening protocols or other kinds of scientific information developed at WorldVeg, provided the sharing of such information does not conflict with existing agreements or policies of WorldVeg.
Seed
Each consortium company can request 15 lines free of charge, per year from WorldVeg, subject to seed availability and phytosanitary clearance of requested accessions/lines. If companies request more than 15 lines, each additional line will be charged processing and shipping fees (US$30 per genebank accession; US$50 per breeding line). WorldVeg only bears the cost of one shipment.

Transfer of any genebank germplasm accessions or improved genetic materials from WorldVeg to consortium companies shall follow WorldVeg material transfer agreements - Standard MTA for genebank germplasm accessions, and MTA₂ for WorldVeg-developed genetic materials.

Updates on breeding progress
Consortium companies receive newsletters highlighting the latest developments of WorldVeg breeding efforts and the evaluation results of demonstration trials, once a year. Other news and information of potential interest to members is sent throughout the year. A softcopy of WorldVeg’s Annual Report is also made available to all consortium companies.

Participation in special projects
Consortium companies are eligible to develop and participate in special collaborative projects with WorldVeg, subject to additional collaboration costs. APSA promotes opportunities to participate in selected collaborative projects to all its members from time to time. Ongoing special projects include, as examples:

- Chili leaf curl disease in Asia: Diversity and resistance (July 2020 – June 2024).
- Growing new markets with better bitter gourd genetics: WorldVeg’s monoecious, gynoecious and predominantly female lines of different market segments developed through recurrent selection to breed breakthrough hybrids (February 2023 – January 2025).
- Creating sustainable markets with solid loofah genetics: WorldVeg’s leaf curl virus and downy mildew disease-resistant lines of different market segments essential to develop breakthrough hybrids (March 2024 – February 2026).

For special projects in 2024, please visit the APSA website for more details.
Training

Short-term training courses on molecular breeding of vegetable crops will be run in 2024, and other training opportunities are announced as they arise. Staff from consortium companies receive preferential access and a 20% discount on tuition for WorldVeg training, a benefit that extends to all employees of a consortium company.

It is a partnership

The APSA-WorldVeg vegetable breeding consortium is a partnership, and WorldVeg greatly values essential information from consortium companies to make its breeding programs more relevant to producers, that to the following information that is requested.

- **Regular feedback from evaluation trials of improved breeding lines.** WorldVeg scientists will specify traits to be monitored, and provide experimental protocols.
- **Annual report on varieties sold** with WorldVeg germplasm in their pedigree, the WorldVeg-developed traits these varieties harbor, and the quantity of seed sold (in kilograms per variety per year). Consortium companies will not be asked to reveal the pedigree of their varieties, and all data will be kept strictly confidential.

Fees in 2024, by calendar year

- Medium/large companies (100 employees or more): US$6,900 per annum
- Small/start-up companies (less than 100 employees): US$2,900 per annum

To join, please contact the APSA Secretariat or CLICK HERE:

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